"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, V. I.;VAIL, L. V.

Clinical aspect of paratyphoid breslau in infants, preliminary communication. Vopr. pediat. 19 no. 5:16-20 1951.
(CIML 21:3)

1. Of the Department of Children's Infectious Diseases (Head -- Prof. M. G. Danilevich), Leningrad Pediatric Medical Institute (Director -- Prof. N. T. Shutova).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I.

Effect of adrenaline on kidney function in dogs during radiation sickness induced by polonium. Med. rad. 5 no.9:55-59 S '60. (MIRA 13:12)

(RADIATION SICKNESS) (POLONIUM—ISOTOPES)
(ADRENALINE) (KIDNEYS)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z. I.

11-G

ca

Influence of caffeine, corazole, strychnine, and bromide on elaboration of antibodies. V. M. Chernov and Z. I. Poluboyarinova. *Farmakol. i Toksikol.* 9, No. 2, 30-9 (1946).—Immunization of rabbits against tetanus by 2 subcutaneous injections 20 days apart, dose 5 and 3 cc., is not enhanced by auxiliary injections of corazole (I) 0.01, caffeine (II) 0.04 or strychnine (III) 0.0001 g./kg. while prolonging the periods between antigen injections. Antitoxin assays show no significant difference from control rabbits receiving auxiliary injections of physiol. salt soln. Subcutaneous KBr (2.4 cc. of 20% soln.) notably decreases the antitoxin titer both in the stated immunization treatment and in the subarachnoid method. For effective use of I, II, or III to stimulate antibody formation the drug should be given toward the end of the immunization treatment. The similar action of such unlike drugs as KBr and I, II, or III suggests a common mechanism, probably stimulation of cutaneous or gastrointestinal receptors, and emphasizes the role of the nervous system in antibody formation. No stimulation is observed in the subarachnoid method with I or III, but II lowers the antitoxin titer. With 20 days (instead of 8) as the interval in subarachnoid immunization, II ceases to lower the antitoxin titer and becomes more like I and III. When antibody formation is decreased before the second injection, in the manner described by Speranskii (*Sol. Nervnoi Sistemy v Patologii*, (1932)), KBr loses its inhibiting capacity and even stimulates antitoxin formation. 31 references. Julian F. Smith

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

USSR/Human and Animal Physiology. The Effect of Physical Factors T-14

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65847

Author : Poluboyarinova Z.I.
Inst : -
Title : The Change in the Functional Activity of the Kidneys in Dogs Treated with Polonium.

Orig Pub : Tr. Vses. konferentsii po med. radio. Eksperim. med. radiol. Moskva, Medgiz, 1957, 190-194

Abstract : Po was injected subcutaneously in doses of 0.03-0.04 millicurie/kg into 10 dogs with exteriorized ureters. In acute and subacute course of sickness a reduction in diuresis in general was observed and a sharp reduction in diuresis with a water load. With a salt load diuresis decreased when the course of the process was acute and increased when it was subacute. The Cl content of the urine decreased. Protein appeared in the urine after 10 to 19 days, and the albuminuria progressed subsequently. In the first half of the illness an

Card : 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I.

Changes in the functional activity of kidneys in dogs during chronic radiation sickness induced by strontium-90. Radiobiologiia 1 no.3:372-377 '61. (MIRA 14:10)
(STRONTIUM—ISOTOPES) (KIDNEYS)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I.

Action of unithiol on renal function in dogs with ionizing radiation lesions. Med. rad. 8 no.6:44-50 Je '63. (MIRA 17:4)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I.

Changes in the water and salt metabolism of dogs exposed to radioactive substances. Radiobiologiia 1 no.6:866-873 '61; (MIRA 15:2)
(RADIATION SICKNESS) (WATER METABOLISM)
(MINERAL METABOLISM)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I.; STREL'TSOVA, V.N.

Mechanism of functional and morphological renal changes in radiation sickness (Po^{210}) in rats treated with unithiol. Med. rad. 9 no.7:22-27 Jl '64. (MIRA 18:5)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I. (Moskva, D-182, Zhivopisnaya ul., 24, kv. 33);
STREI'TSOVA, V.N. (Moskva, D-182, Shchukinskaya malaya ul., 10-a, kv.19)

Appearance of multiple neoplasms in dogs under the influence of Sr^{90}. Vop. onk. 8 no.11:16-20 '62. (MIRA 17:6)

1. Iz Akademii meditsinsikh nauk SSSR.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 13546-65 EWG(j)/EWT(m) SSD/AFWL/AMD/Pb-4

ACCESSION NR: AP4042742 S/0241/64/009/007/0022/0027

AUTHOR: Poluboyarinova, Z. I.; Strel'tsova, V. N.

TITLE: Mechanism of functional and morphological changes in kidneys of rats treated with unithiol for radiation sickness (Po^{210})

SOURCE: Meditsinskaya radiologiya, v. 9, no. 7, 1964, 22-27

TOPIC TAGS: carcinoma, mammary gland carcinoma, radiation therapy, leukopenia, blood count

ABSTRACT: Acute radiation sickness was induced in 80 experimental white male rats (150 to 180 g) with a subcutaneous Po^{210} injection (0.075 microcuries/kg) and 20 animals served as a control. Forty-five of the 80 experimental animals were treated with unithiol (100 mg/kg dose) twice daily for 6 days, and the control animals received the same unithiol therapy. Unithiol in the form of a 5% solution prepared with a 0.2% sodium bicarbonate solution was used. General condition of animals was determined by body weight changes and blood indices, and the functional state of the kidneys was determined by diuresis and specific gravity of urine. Animals were

Card 1/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 13546-65
ACCESSION NR: AP4042742

killed at various periods ranging from 10 min to 50 days following the Po^{210} injection and unithiol therapy, and morphological and histoautoradiographic investigations of the kidneys were made. Findings show that unithiol therapy increases the life expectancy of Po^{210}-affected animals by increasing kidney isotope excretion and intensifying body regeneration reactions. At the same time a functional disorder of the kidneys in which the glomerulus becomes inadequate appears, changing gradually to nephrosclerosis. In both experimental and control animals, unithiol inhibits diuresis the first 3 or 4 days, and in the following days polyuria of a compensatory nature is found. Morphological investigations of control animal kidneys show that unithiol causes marked hyperemia of glomerulus capillaries and stroma during the first seven days and is followed by a transitory increase of cells in the glomerulus which disappears by the 14th day. The therapeutic effect of unithiol in Po^{210}-affected animals is based on reducing the period of degenerative necrobiotic kidney changes and accelerating the regeneration period. However, this regeneration does not ensure complete restoration, but is limited to proliferation of epithelium in renal tubules without subsequent differentiation. The basic mass of dead elements in the renal parenchyma is replaced by

Card 2/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 13546-65
ACCESSION NR: AP4042742

connective tissue with the development of nephrosclerosis. Orig. art. has: 5 figures.

ASSOCIATION: None

SUBMITTED: 12Aug63 INCL: 00 SUB CODE: LS

NR REF SOV: 005 OTHER: 002

Card 3/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARINOVA, Z.I. (Moskva); STRELTSOVA, V.N. (Moskva)

Dyshormonal tumors in dogs following the administration of strontium-90. Vop. onk. 11 no.12:45-48 '65.

(MIRA 19:1)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYAROV, P., marshal bronetankovykh voysk

Urgent tasks of tankmen. Voen.vest. 42 no.9:4-7 S '62. (MIRA 15:8)

(Tanks (Military science))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

CA

2)

The waterproofing of wool fabrics and wool substitutes. V. S. Roskin and K. I. Polutoyarova. *Legkaya Prom.* 15, No. 7, 78-85(1938); *Chem. Zentr.* 1938, I, 774.—In expts. on the waterproofing of wool and part-wool fabrics all the typical methods, such as adsorption of $Al(OH)_3$, application of a paraffin emulsion, and pptn. of Al soaps, were shown to be equally effective. Exposure to sunlight for 2 months did not destroy the protective action of the impregnated materials. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARTSEV, A. G.

2

L 52056-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACCESSION NR: AR5008963 S/0137/65/000/001/G020/G020

26
B

SOURCE: Ref. zh. Metallurgiya, Abs. 1G118

AUTHOR: Mikulinskiy, A. S.; Kosarev, V. A.; Yumanova, L. V.; Sipeyko, I. Ye.; Selyanskiy, A. P.; Panfilov, S. A.; Poluboyartsev, A. G.

TITLE: Semi-industrial furnace for the extraction of alkaline metals by the thermal vacuum method

CITED SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 37, 1964, 28-30

TOPIC TAGS: metallurgy, alkali metal, potassium

TRANSLATION: The article describes the design and testing results of a semi-industrial rotary vacuum furnace. The device has internal and external heaters for heating the charge, which permits an increase in the productivity of the furnace. The unit also has built-in devices for loading materials and unloading reaction residues, which provides semi-continuous operation of the furnace. The working volume of the furnace is 15 m^3, the volume of working space of the retort is 1.8 m^3. The design developed provides conditions for extraction of metallic potassium by the carbide thermal method.

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PATRUSHEV, D.A.; POLUBOYARTSEV, A.G.

Mechanism of slime formation during the condensation of phosphorus from electric furnace gases. Zhur. VKHO 9 no. 2:235-236 '64. (MIRA 17:9)

1. Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARTSEV, A.G.; MIKULINSKIY, A.S.

Mechanism and technology of the thermal reduction of potassium chloride. Zhur. prikl. khim. 36 no.12:2610-2619 D'63. (MIRA 17:2)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PHASE I BOOK EXPLOITATION SOV/4548

Akademiya nauk SSSR. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali

Primeneniye vakuuma v metallurgii (Use of Vacuum in Metallurgy) Moscow, Izd-vo AN SSSR, 1960. 334 p. Errata slip inserted. 4,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A.A. Baykova. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali.

Resp. Ed.: A.M. Samarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: G.M. Makovskiy; Tech. Ed.: S.G. Markovich.

PURPOSE: This collection of articles is intended for technical personnel interested in recent studies and developments of vacuum steelmaking practice and equipment.

COVERAGE: The book contains information on steel melting in vacuum induction furnaces, and vacuum arc furnaces, reduction processes in vacuum, and degassing of steel and alloys. The functioning of apparatus and equipment, especially vacuum furnaces and vacuum booster pumps is also analyzed. Personalities are mentioned in connection with some of the articles and will appear in the Table of Contents. Three articles have been translated from English. Some of the

Vere, I. (Hungarian People's Republic). The Mechanism of Degassing of Molten Steel in Vacuum 257

Kamenetskaya, D.S., I.B. Piletskaya, and V.I. Shiryayeva. On the Problem of Vacuum Melting of Metals 264

Elliot, D. Solubility of Nitrogen in Iron-Chromium-Nickel Melts 273

PART V. APPARATUS AND EQUIPMENT

Pogel', A.A. Levitation Melting of Metals in Vacuum or in the Inert-Gas Atmosphere 279

Marmer, E.N., and E.Ye. Khasanov. Investigation of Individual Subassemblies of Vacuum Electric Furnaces 290

Mikulinskiy, A.S., A.P. Selyanskiy and A.G. Poluboyartsev. Highly Productive Continuous Vacuum Furnaces 298

Tseytlin, A.B. A New Series of Highly Productive Vapor-Stream Pumps [G.G. Kamenshchikov and V.A. Kosarev participated in the work] 310

Kuznetsov, V.I. Highly Productive Mechanical Booster [Roots] Pumps 316

Baykov, V.S. Determination of Gas Content in Steel and Ferroalloys 320

Gurevich, Ya.B. Hot Rolling of Metals in Vacuum 326

AVAILABLE: Library of Congress

14

Poluboyartsev, A.G.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

BUCHNEV, K.N., prof.; SEAKHMATOV, M.M., kand. veterinarnykh nauk; TITOV, V.L., nauchnyy sotrudnik; MEN'SHIKOV, L.F., nauchnyy sotrudnik; KRIVENKO, O.P., vrach-laborant; VOVK, V.I., vrach-laborant; LAISHEVA, M.M., vrach-laborant; POLUBOYAROVA, G.V., vrach-laborant

Diagnosis of rabies by precipitation reaction in agar gel. Veterinariia 40 no.3:66-70 Mr '63. (MIRA 17:1)

1. Alma-Atinskiy zooveterinarnyy institut (for Buchnev).
2. Laboratoriya virusologii nauchno-issledovatel'skogo veterinarnogo instituta Kazakhskoy akademii sel'skokhozyaystvennykh nauk (for all except Buchnev).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARTSEVA, L.A.; ANISIMOVA, L.M.; BLOKH, M.Sh.; NOVAKOVSKIY, V.M.

Corrision behavior of carbon steel in nitrose acids. Khim. prom. no.10:782-785 O '63. (MIRA 17:6)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 17904-63 EWP(q)/EWT(m)/BDS AFFTC JD/WB

ACCESSION NR: AP3003768 S/0080/63/036/006/1264/1273

AUTHORS: Polubovartseva, L. A.; Zarubin, P. I.; Novakovskiy, V. M. 55

TITLE: Parallel analysis of the corrosion rate of pipes and rotating discs under conditions of diffusion control 16

SOURCE: Zhurnal prikladnoy khimii, v. 36, no. 6, 1963, 1264-1273

TOPIC TAGS: corrosion rate, diffusion control, NaOH, Pb, H sub 2 SO sub 4, Prandtl number

ABSTRACT: Empirical equations were revealed, based on experimental data, connecting the corrosion rate of discs and tubes with the traveling speed (i) for Cu in a solution of 1.95 g/l Fe^{+3} + 0.1 N HCl at 30F; (ii) for Pb in a solution of 2N NaOH + 0.1 N $NaNO_3$ at 40F; (iii) for steel 10 in concentrated H_2SO_4 at 60F. The empirical equations for converting the rotation rate of the sample disc to an equivalent (in respect to diffusion) linear rate of liquid flow in a tube were investigated; conformity was shown between the empirical equations obtained and a theoretical equation developed earlier. To take advantage of that equation for converting disc rotation rate to equivalent linear rate of an aggressive liquid in a pipeline, one must know the kinematic viscosity of a given medium and the co-

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 17904-63

ACCESSION NR: AP3003768

efficient of diffusion of the substance, and the rates of supply and removal which determine the rate of the process. Orig. art. has: 2 tab., 16 equa., 11 fig.

ASSOCIATION: none

SUBMITTED: 27Jul62 DATE ACQ: 07Aug63 ENCL: 00

SUB CODE: ML, MA NO REF SOV: 010 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

ZARUBIN, P.I.; POLUBOYARTSEVA, L.A.; NOVAKOVSKIY, V.M.

Investigating the corrosion of metals in conditions of heat transfer. Zashch. met. 1 no.3:297-303 My-Je '65. (MIRA 18:8)

1. Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut i Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni L.Ya. Karpova.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 23452-66 EWT(m)/EWA(d)/EWP(t) IJP(c) JD/HW

ACC NR: AP6009709 SOURCE CODE: UR/0064/65/000/003/0070/0073

AUTHOR: Poluboyartseva, L. A.; Reyfer, A. A.; Mantorova, T. M.; Volikova, I. G.; Istrina, Z. F.

ORG: [Mantorova] UNIkhim); [Istrina] NIIkhimmash

TITLE: Corrosion resistance of materials for equipment in the production of sodium sulfide

SOURCE: Khimicheskaya promyshlennost', no. 3, 1966, 70-73

TOPIC TAGS: corrosion resistance, corrosion rate, chromium steel, sodium sulfide steel

ABSTRACT: The paper deals with the study and selection of corrosion-resistant materials as well as the determination of applicability limits of carbon steels for use in the manufacture of sodium sulfide. Both plant and laboratory tests were performed on samples of St.3 steel, Sch-28 cast iron, 1Kh18N10T and Kh17N13M2T chromium-nickel steels, Kh25, Kh25N4T, Kh28, Kh28NA, 3Kh13, and Kh17 high-chromium steels, 0Kh21N6M2T, and 1Kh21N5T low-carbon steels, Kh17G9AN4, Kh17N13M2T, and Kh14G14N3T manganese steels, as well as VT-1 technical-grade titanium, zinc, nickel (98% Ni) and pure (99.6 -- 98.6%) chromium. The compositions of the above steels are presented in tabular form. Both welded and unwelded test specimens were used, measuring 80x25x10 mm, and 40x20x3 mm, respectively. The tests conducted at the sodium sulfide

Card 1/2 UDC: 661.249.21:66.018.183

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 23452-66

ACC NR: AP6009709 3

shop of the Shchelkovo Chemical Plant have shown that all the steels were corrosion resistant, meeting GOST 5272-51 specifications, with a corrosion rate of less than 0.1 g/(m^2.hr), and a 0.3 to 0.7 g/(m^2.hr) corrosion rate for the carbon steels. All chromium-nickel and high-chromium steels were shown to have high, medium, and low corrosion resistance depending on the specific usage designation. The steels were tested in sodium sulfide solutions whose concentrations ranged from 5--65% under varying conditions of temperature and test duration, in both stationary and agitational conditions. The results are presented in tabular form. In conclusion, the authors find that high-chromium steels have the highest corrosion resistance in sodium sulfide solutions. Both the decrease of chromium and the increase of nickel or manganese are shown to have an adverse effect on the anti-corrosion properties of steel. The steels are listed in descending order with respect to degree of corrosion resistance as follows: Kh28, Kh28Na, Kh25T, Kh25N4T, OKh21N5T, 1Kh21N5T, OKh21N6M2T, 1Kh18N10T, Kh17N13M2T, Kh17G9AN, Kh14G14N3T, Kh17, Kh13, St. 3. Orig. art. has: 1 figure, 6 tables. [LD]

SUB CODE: 11,13/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 002

Card 2/2 dda

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUBOYARTSEVA, L.A.; NOVAKOVSKIY, V.M.

Corrosion of low-carbon steel in concentrated sulfuric acid. [Trudy] UNIKHIM no.9:93-100 '61. (MIRA 15:12)
(Steel—Corrosion)
(Disks, Rotating—Corrosion)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

BALAT'YEV, Pavel Konstantinovich, kand. tekhn. nauk; SOKOLOV, Vladimir Aleksandrovich, kand. tekhn. nauk; POLUBNEVA, V.I., inzh., red.

[Repeated vibration in the production of rainforced concrete panels in formworks; practices of factory No.12 of the Main Administration of the Building Materials Industry, attached to the Executive Committee of the Moscow City Council of Workers' Deputies] Povtornoe vibrirovanie pri kassetnom proizvodstve zhelezobetonnykh panelei; opyt zavoda no.12 Glavmospromstroimaterialov. Moskva, Gosstroiizdat, 1962. 22 p. (MIRA 17:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Zamestitel' direktor. po nauchnoy chasti Gosudarstvennogo nauchno-issledovatel'skogo instituta zhelezobetonnykh izdeliy, stroitel'nykh i nerudnykh materialov (for Balat'yev). 3. Starshiy nauchnyy sotrudnik Gosudarstvennogo nauchno-issledovatel'skogo instituta zhelezobetonnykh izdeliy, stroitel'nykh i nerudnykh materialov (for Sokolov).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

NOVAKOVSKIY, V.M.; LAPSHINA, E.F.; POLUBOYARTSEVA, L.A.

Cathodic protection of copper in acid solutions. [Trudy] UNIKHIM no.9:122-130 '61. (MIRA 15:12)
(Copper--Corrosion) (Cathodic protection)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

NOVAKOVSKIY, V.M.; POLUBOYARTSEVA, L.A.

Interaction between metals and oxidizers in electrolytes.
[Trudy] UNIKHIM no.9:37-51 '61. (MIRA 15:12)
(Oxidation, Electrolytic)
(Passivation)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUCH,A.

Familial occurence of transitory eosinophilia(Zuelzer-Apt.).
Cesk. pediat. 19 no.1:65 Ja'64

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUCH, A., MUDr.

Newer experiences in the treatment of high fever. Cesk. pediat. 11 no.9:719-722 Sept 56.

1. Kremnica, OUNZ.
(FEVER, ther.
high fever, recent advances (Cz))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUCH, A.

Chlorpromazine in the treatment of toxic chickenpox. Cesk.pediat. 15 no.3:248-250 Mr '60.

1. Detske oddelenie Okresneho ustavu narodneho zdravia v Kremnici, veduci MUDr. A. Poluch.
(CHLORPROMAZINE ther.)
(CHICKENPOX ther.)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUCH, A.

A case of extreme hypothermia in a newborn infant. Cesk. pediat. 18 no.8:714-716 Ag '63.

1. Detske oddelenie UNZ v Kremnici, veduci MUDr. A. Poluch.
(HYPOTHERMIA) (INFANT, PREMATURE, DISEASES)
(INFANTICIDE) (CHLORPROMAZINE)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

S/148/61/000/005/004/015
E113/E180

AUTHORS: Poluchin, P.I., Osadchiy, V.Ya., Golubchik, R.M., and Zel'dovich, L.S.

TITLE: Determination of axial forces acting on the mandrel of a piercing mill

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, 1961, No.5, pp. 102-108

TEXT: The purpose of this work is to give an analytical formula for the determination of axial forces acting on the mandrel of a piercing mill. To derive this formula statics and mathematical calculus are applied. The axial forces Q_I, Q_{II}, Q_{III} acting on the mandrel in each region are expressed in terms of the geometry of the mandrel, the friction coefficient existing between the metal surface and the mandrel, and the reaction forces from the rollers. Fig.1 shows the force diagram for the determination of axial forces acting on the mandrel according to N.D. Lomakin (Ref.5: N.D. Lomakin, "Determination of the axial forces acting on the mandrel of a piercing mill. Metal working by pressure". Collected articles under the editorship of N.P. Gromov, issue IV, 1956).

Card 1/5

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

Determination of axial forces..... S/148/61/000/005/004/015
E113/E180

final form of formulae for the axial forces is derived. To check the correctness of the derived formulae, experiments have been carried out at Yuzhnotrubnyy zavod, one of the Soviet tube mills. In these experiments, the axial forces were measured for various cone angles of the rolls and various reductions at the tip of the mandrel. For the same values, the axial forces were calculated by means of the derived formula and are tabulated. Fairly good agreement between the theoretical and calculated values of axial forces can be observed. P.T. Yemel'yanenko, S.I. Borisov and A.I. Tselikov are mentioned in the paper.
There are 3 figures, 1 table and 5 Soviet references.

ASSOCIATION: Moskovskiy institut stali
(Moscow Steel Institute)

SUBMITTED: July 1, 1960

Card 3/5

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUCKIN, P.I.; GOLUBCHIK, R.M.; OSADCHIY, V.Ya.; KIRVALIDZE, N.S.

Methods of measuring the axial forces acting on the mandrel in the tube reeling process. Izv. vys. ucheb. zav.; chern. met. 4 no.8:72-77 '61. (MIRA 14:9)

1. Moskovskiy institut stali i Yuzhnotrubnyy zavod.
(Pipe mills)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

KOBOZEV, V.N., inzh.; POLUDNENKO, Yu.Z., inzh.; [redacted], I.Ye.

1PZ pneumatic charger. Gor. zhur. no.7:64-65 Jl '61. (MIRA 15:2)

1. Institut Giprorudmash (for Kobozev, Poludnenko). 2. Shakhta im. Ordzhonikidze, Krivoy Rog (for Ryabov).
(Blasting--Equipment and supplies)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

KOGAN, Ya.N., inzh.; POLUDENNYY, V.U., inzh.

Installing the equipment for sugar factories. Nov. tekh. mont. i spets. rab. v stroi. 21:9-12 Je '59. (MIRA 12:8)

1. Trest No.7 Glavneftemontazha Minstroya RSFSR i Stroitel'no-montazhnoye upravleniye No.76 tresta No.7 Glavneftemontazha.
(Sugar machinery)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

SINITSYN, V.A.; POLUDNIKOV, V.N.; GURVICH, V.B.; YEGOROV, V.M.; RETUYEV, V.I.

Design defects and improvement of PPM-10 drives. Prom. energ. 20 no.7:14-19 Jl '65. (MIRA 18:12)

1. Permskiy neftepererabatyvayushchiy zavod (for Sinitsyn).
2. Mariyskiy tsellyulozno-bumazhnyy kombinat (for Poludnikov).
3. Zavod "Elektroapparat" (for Gurvich, Yegorov, Retuyev).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A.I.

Effect of thyroid hormone on the regeneration of adrenal cortex. Biul. eksp. biol. i med. 57 no.1:88-91 Ja '64. (MIRA 17:10)

1. Kafedra gistologii i embriologii (zav. - chlen-korrespondent AMN SSSR prof. A.A. Voytkevich) Voronezhskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A. M.

Poluektov, A. M. "On nonspecific results of the complement fixation reaction for glanders in hyperimmunized horses," Trudy Kirovskogo in-ta epidemiologii i mikrobiologii, Collection 2, 1948, p. 165-69, - Bibliog: 6 items.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A. M.

20817. Poluektov, A. M. Membrannye fil'try pri bakteriologicheskom issledovanii moloka. Sbornik dokladov Pervoy Vs esoyuz. Konf-stii po moloch. delu. M., 1949, s. 142-47.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A.M., dotsent.

For high hygienic standards on collective and state farm dairy sections. Veterinariia 32 no.11:84-86 N '55. (MLRA 8:12)

1.Kirovskiy sel'skokhozyaystvennyy institut.
(DAIRYING--HYGIENIC ASPECTS)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUYEKTOV, A.M.

Outbreak of trichinosis in Kirov. A.M. Poluektov. Med.paraz. i paraz. bol. 27 no.2:218 Mr-Ap '58 (MIRA 11:5)

1. Iz Kirovskogo sel'skokhozyaystvennogo instituta.
(KIROV--TRICHINA AND TRICHINOSIS)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A.M., dots.; CHUVATIN, V.M., vetvrach

Experience in rodent control at meat and milk and food control stations. Veterinariia 36 no.3:64 Mr '59. (MIRA 12:4)

1. Kirovskiy sel'skokhozyaystvennyy institut (for Poluektov).
2. Kirovskaya myaso-molochnaya i pishchevaya kontrol'naya stantsiya (for Chuvatin).

(Rats--Extermination)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PERSIANOV, V.A., kand.tekhn.nauk; POLUEKTOV, A.P., inzh.

Automatic device for rolling stock computations and determination of the traffic loads of station districts and junctions. Avtom., telem. i sviaz' 6 no.7:14-16 Jl '62. (MIRA 16:2)
(Railroads--Electronic equipment) (Railroads--Signaling)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A.P., inzh.; PERSIANOV, V.A., kand.tekhn.nauk

Important problems of the improvement of passenger suburban and local transportation. Zhel.dor.transp. 44 no.9:63-66 S '62. (MIRA 15:9)

(Railroads--Commuting traffic) (Transportation, Automotive)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

ZAKIS, E.V., kand.tekhn.nauk; PERSIANOV, V.A., kand.tekhn.nauk;
POLUEKTOV, A.P., inzh.

Automatization of operational procedures in railroad transportation.
Zhel.-dor.transp. 43 no.9:64-67 S '61. (MIRA 14:8)
(Railroads)
(Automatic control)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 44300-66 EWT(1) IJP(c) WW

ACC NR: AP6018805 SOURCE CODE: UR/0056/66/050/005/1265/1278

77
76
B

AUTHOR: Pustovoyt, V. I.; Poluektov, I. A.

ORG: Institute of Physicotechnical and Radiotechnical Measurements (Institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy); Physics Institute im. P. N. Lebedev (Fizicheskiy institut)

TITLE: Attenuation oscillations and the speed of acoustic waves in semiconductors and metals in the presence of a strong magnetic field

SOURCE: Zh eksper i teor fiz, v. 50, no. 5, 1966, 1265-1278

TOPIC TAGS: ultrasonic wave propagation, Coulomb field, permittivity, matrix element, semiconductor conductivity, metal conductivity, magnetic field

ABSTRACT: It has been shown that an important factor in the establishment of the amplitude of attenuation oscillations of ultrasonic waves in degeneration semiconductors and metals is the formation of a space charge by the wave and the Coulomb field connected with it. This circumstance has been taken into consideration in setting up

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 44300-66

ACC NR: AP6018805

a dispersion equation for the propagation of ultrasonic waves in semiconductors and metals. To investigate the nature of oscillations, a knowledge of the complex longitudinal conductivity of the medium is required. To find the complex permittivity of the medium under conditions of Landau quantization, the equation has been examined for the density matrix operator. It has been shown that for the calculation of the longitudinal permittivity of the medium, the equation of the density matrix in which collisions are taken into account can be reduced to a "kinetic equation" for a single matrix element. The possibility of oscillations of the imaginary and actual conductivity has been studied. It has been shown that the imaginary part of conductivity oscillates only under extremely rigid conditions. Oscillations of the attenuation and speed of sound, connected with oscillations of the actual part of conductivity, have been investigated and the results compared with experimental findings. The authors thank L. V. Keldysh for his criticism and valuable remarks. Orig. art. has: 1 figure and 41 formulas. [Based on authors' abstract] [NT]

SUB CODE: 20/ 11/ SUBM DATE: 10Jul65/ ORIG REF: 007/ OTH REF: 014/

Card 2/2 UCR

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 31161-66 EWT(1)/EWT(m)/T/EWP(t)/EWA(h) IJP(c) JD/WW/AT
ACC NR: AP6006812 SOURCE CODE: UR/0181/66/008/002/0345/0352

AUTHOR: Poluektov, I. A.; Popov, Yu. M.

ORG: Physics Institute im. P. N. Lebedev AN SSSR, Moscow (Fizicheskiy institut AN SSSR)

TITLE: Effect of a strong magnetic field on the energy distribution and slowing-down times of nonequilibrium current carriers in semiconductors

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 345-352

TOPIC TAGS: strong magnetic field, current carrier, semiconductor theory, semiconductor band structure

ABSTRACT: The authors consider the effect of a strong magnetic field $(\hbar\Omega \gg kT)$ on the energy distribution and slowing-down times of nonequilibrium current carriers in semiconductors where the external excitation source creates electron-hole pairs with an energy which is much greater than the thermal energy. The distribution function which is derived for the current carriers is not monotonic and may fluctuate on Landau levels. The slowing-down time in conditions where $\hbar\Omega \ll$

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 31161-66
ACC NR: AP6006812

(ε is the energy of a nonequilibrium electron or hole), are weakly dependent on the magnetic field. An analysis of the results indicates that is practically impossible to amplify emission by using intraband transitions in semiconductors placed in a magnetic field. Orig. art. has: 15 formulas.

SUB CODE: 20/ SUBM DATE: 15Jun65/ ORIG REF: 003/ OTH REF: 003

Card 2/2 LC

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 31520-66 EWT(1)

ACC NR: AP6008821 SOURCE CODE: UR/0294/66/004/001/0003/0011

AUTHOR: Vinogradov, A. V.; Poluektov, I. A.

29
28
B

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy institut Akademii nauk SSSR)

TITLE: The excitation of atoms by neutral particles

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 1, 1966, 3-11

TOPIC TAGS: particle collision, collision cross section, neutron, excitation cross section, inelastic collision, heavy particle

ABSTRACT: There is now very little experimental information available on the effective cross sections of the excitation of atoms colliding with heavy particles (other atoms, ions, molecules) in the relatively low energy region. Theoretical calculations, usually performed by the Born method (first approximation in perturbation theory), are valid only for certain energy levels. It is, therefore, necessary to perform calculations beyond the first approximation in perturbation theory. This problem has been investigated by L. Vaynshteyn, L. Presnyakov, and I. Sobel'man (Zh. eksperim. teor. fiz., 43, 518, 1962) for the quasi-classical description of collisions. The method used is employed by the present authors for the calculation of cross sections of inelastic collisions between heavy particles. A method is proposed for the construction of an approximate matrix element of transition, which

Card 1/2

UDC 539.186.3.539.196.2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 31520-66

ACC NR: AP6008821

retains the fundamental analytical properties of the precise method. A calculation is performed for the effective cross sections of excitation of hydrogen atoms during their collision with nitrogen molecules and hydrogen atoms. The results are in good agreement with experimental data. In conclusion, the authors express their gratitude to I. I. Sobel'man for a useful discussion. Orig. art. has: 3 figures and 30 formulas.

SUB CODE: 20 / SUBM DATE: 21Sep64 / ORIG REF: 005 / OTH REF: 004

Card 2/2 mc

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 29528-66 EWT(1) IJP(c)

ACC NR: AP6011654 SOURCE CODE: UR/0020/66/167/003/0559/0561

AUTHORS: Poluektov, I. A.; Popov, Yu. M.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy institut Akademii nauk SSSR)

TITLE: Influence of a strong magnetic field on recombination radiation in semiconductors

SOURCE: AN SSSR. Doklady, v. 167, no. 3, 1966, 559-561

TOPIC TAGS: recombination radiation, semiconductor carrier, semiconductor band structure, distribution function, solid state laser, stimulated emission, line width

ABSTRACT: To check whether a magnetic field is capable of changing the state density in a semiconductor, the authors calculated the intensity of recombination radiation in a magnetic field for an interband transition in semiconductors, and determined the emission line shape assuming that the electron and hole distribution functions are given for the conduction and for the valence bands. An equation is derived for the number of quanta of specified frequency emitted per unit time during a spontaneous transition of specified line width, and the electron frequency at which the magnetic field becomes influential is determined from this

Card 1/2 UDC: 538.615

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

L 29528-66

ACC NR: AP6011654

equation. On approaching the spontaneous generation threshold, the line width, expressed in terms of the effective temperature, becomes close to 3K, and when the sample temperature exceeds this value the emission line becomes narrower. The results explain the laser action obtained in indium antimonide in a magnetic field and the drop in the generation threshold in indium arsenide when an external magnetic field is applied. It is noted in conclusion that the emission line shape has the same shape for transitions from the conduction band to an acceptor level than in the valence band, where the magnetic field still has no great effect on the energy spectrum of the holes. This report was presented by Academician D. V. Skobel'tsyn 13 July 1965. Orig. art. has: 12 formulas

SUB CODE: 20/ SUBM DATE: 08Jul65/ ORIG REF: 002/ OTH REF: 007

Card 2/2 JS

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, Ivan Antonovich; MELIKSETOV, Sergey Stepanovich; KOLOMIYETS, Aleksandr Andreyevich; BOL'SHINSKIY, Grigoriy Moiseyevich; SAMCHOV, Vitaliy Tikhonovich

[New technology of mine shaft sinking] Novaia tekhnologiia sooruzheniia shakhtnykh stvolov. Moskva, Nedra, 1965. 113 p. (MIRA 18:10)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, I.A.

We shall fulfill the seven-year plan assignment in six years. Ugol' Ukr. 5 no.9:14-16 S '61. (MIRA 14:9)

1. Nachal'nik kombinata Stalinshakhtostroy.
(Donets Basin--Coal mines and mining--Labor productivity)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

KHRUSHCHEV, N.S.; PODGORNYY, N.V.; ZASYAD'KO, A.F.; RUDAKOV, A.P.; KAZANETS, I.P.; SHILIN, A.A.; MEL'NIKOV, N.V.; BURMISTROV, A.A.; SHEVCHENKO, V.V.; MAYAKOV, L.I.; ROZENKO, P.A.; KUZ'MICH, A.S.; ZADEMIDKO, A.N.; BRATCHENKO, B.F.; STRUYEV, A.I.; KRASNIKOVSKIY, G.V.; BOYKO, A.A.; KAGAN, F.Ya.; USKOV, A.A.; VLADYCHENKO, I.M.; TOPCHIYEV, A.V.; DEGTYAREV, V.I.; KHUDOSOVTSEV, N.M.; GRAFOV, L.Ye.; IVANOV, V.A.; KRATENKO, I.M.; GOLUB, A.D.; IVONIN, I.P.; SAVCHENKO, A.A.; ROZHCHENKO, Ye.N.; CHERNEGOV, A.S.; MARKELOV, M.N.; LALAYANTS, A.M.; GAPONENKO, F.T.; POLUEKTOV, I.A.; SKLYAR, D.S.; PONOMARENKO, N.F.; POTAPOV, A.I.; POLYAKOV, N.V.; SUBBOTIN, A.A.; POLSTYANOY, G.N.; TRUKHIN, P.M.; TKACHENKO, A.G.; OSTROVSKIY, S.B.; NYRTSEV, M.P.; DYADYK, I.I.; SHPAN'KO, T.P.; RUBCHENKO, V.P.

Kondrat Ivanovich Pochenkov; obituary. Sov. shakht. 11 no.9: 48 S '62. (MIRA 15:9)
(Pochenkov, Kondrat Ivanovich, 1905-1962)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUYEKTOV, I.

ROZHANSKIY, Z.; POLUEKTOV, I.

Dispatcher-selector unit in grain elevators. Muk.-elev.prom. 20 no.2:21-22 F '54. (MLRA 7:7)

1. Shcherbakovskiy elevator.
(Grain elevators) (Radio--Apparatus and supplies)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, I.

POLUEKTOV, I.; ROZHANSKIY, Z., glavnyy inzhener.

We strive for full use of potentials. Muk.-elev.prom.20 no.5: 20-22 My '54. (MLRA 7:7)

1. Direktor Shcherbakovskogo elevatora (for Poluektov)
(Grain elevators) (Loading and unloading)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, A.P., inzh.

Potentials for a further acceleration the turnover of passenger trains. Zhel.dor.transp. 43 no.3:37-40 Mr '61. (MIRA 14:3)
(Railroads--Passenger traffic)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

ACCESSION NR: AP4042387 S/0056/64/047/001/0181/0187

AUTHORS: Poluektov, I.; Presnyakov, L.; Sobel'man, I.

TITLE: Collisions accompanied by charge exchange

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 1, 1964, 181-187

TOPIC TAGS: particle collision, charge exchange, Hermite matrix, hydrogen, helium

ABSTRACT: Pointing out that earlier difficulties with this problem were due to the use of non-Hermitian functions leading to non-normalized transition probabilities, the authors present a new formulation of the charge-exchange problem, which leads to a system of equations with a Hermitian matrix. An approximate method for integrating this system is developed, analogous to that previously proposed by two of the authors (L. A. Vaynshteyn, L. P. Presnyakov, I. I. Sobel'man, ZhETF v. 43, 518, 1962) for the excitation of atoms. A

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

VAYNSHTEYN, L.A.; POLUEKTOV, I.A.

Calculating the oscillator strength of intercombination transitions by the semiempiric method. Opt. i spektr. 7 no.4:460-465 Ap '62. (MIRA 15:5)

(Quantum theory)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

24.4400

S/051/62/012/004/002/015
E039/E485

AUTHORS: Vaynshteyn, L.A., Poluektov, I.A.

TITLE: Calculations of the oscillator strengths of intercombination transitions using a semi-empirical method

PERIODICAL: Optika i spektroskopiya, v.12, no.4, 1962, 460-465

TEXT: Calculations are made on the field matrix for the spin-orbital and spin-spin magnetic interactions for the sl configuration. Equations are derived from which values of the strength of the oscillator resonance transitions for a series of divalent elements are calculated. These results are compared with experimental data and those obtained using the Pauli-Houston equation (see Table). The equations used are

$$\beta_0 = \frac{\sqrt{l(l+1)}}{2l+1} \frac{\varepsilon_{14}}{\varepsilon_{32} - \Delta_0} \qquad (26)$$

(the Pauli-Houston equation)

Card 1/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

and

$$\frac{1}{\beta^2} = \frac{\varepsilon_{32}}{\Delta_o} - 1 \qquad (28)$$

where

$$\Delta_o = \frac{l}{2l+1}\,\varepsilon_{14} - \varepsilon_{24}$$

With the exception of Mg, Eq.(28) gives values which compare better with experimental results than Eq.(26). The error obtained using Eq.(28) for the elements Mg, Ca, Sr, Ba increases with decrease in Z number, i.e. with decrease in magnetic interaction. In the case of Mg, Eq.(26) gives a better result. In general, if the magnetic interaction is very small, Eq.(26) should be used. A rigid verification of the condition $\Delta_o \ll M$ is only possible by a direct estimate of the radial integrals which until now are estimated by a semi-empirical method. There are 1 figure and 1 table.

SUBMITTED: March 27, 1961

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

Table

Element	Z	Transition	f_{30}/f_{20} by Eq.(26)	f_{30}/f_{20} by Eq.(28)	f_{30}/f_{20} by experiment
Mg	12	$3s^2$ - 3sp	357000	107000	470000
Ca	20	$4s^2$ - 4sp	19500	30552	35800
Zn	30	$4s^2$ - 4sp	3995	6805	7200
Sr	38	$5s^2$ - 5sp	1029	1580	1780
Cd	48	$5s^2$ - 5sp	368	579	680
Ba	56	$6s^2$ - 6sp	127	169	164
Hg	80	$6s^2$ - 6sp	29	50.2	47

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

VILYANSKIY, M.P., doktor med. nauk, otv. red.; POLUEKTOV, L.V., red.; SHEKHURDINA, K.I., zasl. vrach RSFSR, red.

[Materials from the scientific session of the Department of Facultry, Surgery, devoted to the surgical treatment of diseases of the blood vessels and the organs of the gastro-intestinal tract]Materialy nauchnoi sessii kafedry fakul'tetskoi khirurgii, posviashchennoi khirurgicheskomu lecheniiu zabolevanii krovenosnykh sosudov i organov zheludochno-kishechnogo trakta. Omsk, 1962. 56 p. (MIRA 15:9)

1. Omsk. Meditstsinskiy institut. Kafedra fakul'tetskoy khirurgii.
(BLOOD VESSELS—SURGERY) (ALIMENTARY CANAL—SURGERY)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, L.V.

Comparative evaluation of the treatment of perforated ulcers of the stomach and duodenum by repair and resection fo the stomach. Khirurgiia 35 no.12:11-17 D '59. (MIRA 13:6)

1. Iz khirurgicheskogo otdeleniya Tyumenskoy oblastnoy bol'nitsy (glavnyy vrach A.A. Moiseyenko).
(PEPTIC ULCER PERFORATION surgery)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, L.V.

Resection of the stomach following ligation of the internal mammary arteries in stenocardia. Khirurgiia 36 no.1:109-110 Ja '60. (MIRA 13:10)
(ANGINA PECTORIS) (BREAST—BLOOD SUPPLY) (STOMACH—SURGERY)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, L.V.

Mesenteric cyst complicated by torsion of the small intestine. Vest. khir. 85 no. 7:130-131 Je '60. (MIRA 14:1)
(MESENTERY (INTESTINES—OBSTRUCTION)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, L.V.

Remote result of extensive resection of the small and large intestine after gastroenterostomy. Sov.med. 22 no.10:127-128 O '58 (MIRA 11:11)

1. Iz khirurgicheskogo otdeleniya Tyumenskoy oblastnoy bol'nitsy (glavnyy vrach A.A. Moiseyenko).

(GASTRECTOMY, compl.
late postop. intestinal obstruction, surg., large & small intestinal resection, remote results (Rus))
(INTESTINAL OBSTRUCTION, etiol. & pathogen.
gastrectomy, surg., large & small intestinal resection, remote results (Rus))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, L.V.

Repeated operations on the stomach after suture of perforations of gastroduodenal ulcers. Khirurgiia 37 no.2:21-25 F '61. (MIRA 14:1)

1. Iz 1-go khirurgicheskogo otdeleniya (zav. L.V. Poluektov) Tyumenskoy oblastnoy bol'nitsy (glavnyy vrach A.A. Moiseyenko).
(STOMACH--SURGERY) (PEPTIC ULCER)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

BARBANCHIK, A.G.; VILYANSKIY, M.P.; POLUEKTOV, L.V.

Repeated operations on the stomach using mechanical suturing. Sov. med. 28 no.8:15-19 Ag '65. (MIRA 18:9)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - prof. M.P. Vilyanskiy) Omskogo meditsinskogo instituta imeni Kalinina na baze Omskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR K.I.Shekhurdina).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTROV, L.V. (Tyumen', ul. Gertsena, d.77)

Case of inadequate suture in esophagogastrostomy. Nov. khir. arkh. no.5:114-115 S-O '60. (MIRA 14:12)

1. Khirurgicheskoye otdeleniye Tyumenskoy oblastnoy bol'nitsy.
(ESOPHAGUS--SURGERY) (STOMACH--SURGERY)
(SUTURE)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

SHERSTOBITOVA, M.; POLUEKTOV, N.; ANPILOGOVA, Yu.; YAKUSHINA, O.; ORLOVSKAYA, R.

More on veterinary control. Mias. ind. SSSR 29 no.2:20 '58. (MIRA 11:5)

1. Barnaul'skiy myasokombinat.
(Meat inspection)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, M. N.

PROCESSES AND PROPERTIES INDEX

Comparative pharmacological properties of anabasine derivatives. III. N-Methylanabasine. M. N. Poluektov. Farmakol. i Toksikol. 9, No. 5, 8-12(1946). Anabasine (I) is more active than N-methylanabasine (II) by the ratios: paralysis of upper respiratory ganglia in cats, 20:1; adrenal gland stimulation in cats, 60:1; respiratory stimulation in cerebrectomized cats, 25:1; toxicity to mice, 4:1. In spasmodic activity tests with mice) and in vasopressor effect on cerebrectomized cats I is less active than II. Neither I (1% soln.) nor II (5% soln.) is effective as an anesthetic. Julian F. Smith

Docent. Chair Pharmacology. Mil. Med. Acad. im. Kirov,

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

***Sensitive Reaction for Thallium by the Spot Method.** N. S. Poluektov (*Redkie Metally* (*Rare Metals*), 1933, (4) 41–42).—[In Russian.] A drop of saturated phosphomolybdic acid solution is placed on a filter paper and the centre of the spot is touched with a drop of the solution to be tested. Another drop of the acid is added and, if Cu is present, the spot is washed with two drops of saturated $(NH_4)_2C_2O_4$ solution. If a capillary dipped in 50% HBr is then drawn across the damp spot the centre is coloured bluish-green if Tl is present. When only Cu is present the centre remains colourless, whilst the edges of the streak made by the HBr are coloured violet. The reaction cannot be used in the presence of $Sn^{\cdot\cdot}$, $Sb^{\cdot\cdot\cdot}$, $Fe^{\cdot\cdot}$, and the Cu content must not exceed 300 times the Tl content. The sensitivity is 0·2 γ Tl per drop.—D. N. S.

***Two New Sensitive Reactions of Vanadium.** A. S. Komarowsky and N. S. Poluektov (*Redkie Metalli* (*Rare Metals*), 1933, (4), 43–45).—[In Russian.] (1) A drop of the neutral or faintly acid solution is heated for 1 minute in a porcelain dish on the water-bath with 5% $H_2C_2O_4$ solution to reduce V^{V} to V^{IV}. On cooling, a drop of phosphomolybdic acid and a drop of 25% NaOH are added; if V is present a blue colour develops (sensitivity 9·48 γ V). The reaction is retarded by $Ce^{\cdot\cdot\cdot}$, $Pd^{\cdot\cdot}$, $Co^{\cdot\cdot}$, $Sn^{\cdot\cdot}$, $Sb^{\cdot\cdot\cdot}$, whilst $Fe^{\cdot\cdot\cdot}$ and H_2CrO_4 must be removed previously. (2) A drop of the solution mixed in a porcelain dish with a few crystals of Na tartrate to remove the effect of Mo and W is heated to boiling and a drop of 8-hydroxyquinoline in CH_3COOH solution is added; in the presence of V, a black precipitate or turbidity appears (sensitivity is 9·27 γ V). $Fe^{\cdot\cdot\cdot}$ must first be removed with NaOH.—D. N. S.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

9

77

*A New Colour Reaction for Beryllium by the Spot Method. A. S. Komarovsky and N. S. Polyektov (*Zhurnal Prikladnoi Khimii* (*J. Applied Chem.*), 1934, 7, (5), 830-840).—[In Russian.] See *Met. Abs.*, 1934, 1, 510.—M. Z.

COMMON ELEMENTS

COMMON VARIABLES INDEX

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND LETTER

AUTHOR INDEX

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PROCESSES AND PROPERTIES INDEX

BC

A-1

Sensitive drop reaction for copper. A. N. Kosianovski and N. S. [illegible] Appl. Chem. Russ., 1934, 7, [illegible].—A drop of saturated solution of hydroxyquinoline (I) in 80% AcOH, a drop of the solution under analysis, and a second drop of (I) are placed on the same spot on filter-paper, followed by a drop of 25% aq. KCN, when a bluish-red coloration indicates < 0·4×10⁻⁶ g. of Cu^{II}. The coloration is due to C_2N_2 formed from Cu^{II} and CN'. Mg^{II}, Pb, Bi, Cd, Sb^{III}, Sn^{II}, MnO_4', WO_4'', VO_3', Ni^{II}, and Co^{II} do not interfere. Fe^{II} gives a black spot under the above conditions, and should previously be ppt. as $Fe(OH)_3$. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

7

CA

PROCESSES AND PROPERTIES INDEX

New spot test for potassium. N. S. Poluektov. *Mikrochemie* 14, 265-6(1934).—The Na or NH_4 salt of $[C_6H_5(NO_2)_3]_2NH$ is sold as a dye under the name "aurantia." The amine itself is sol. in dil. NaOH or NH_4OH, forming a strongly colored orange-yellow soln. On adding acid, yellow flakes of the amine are pptd. If to the slightly alk. soln. a little K^+ is added an orange-red cryst. ppt. is formed. The reaction can be carried out conveniently as a spot test on filter paper. As reagent, dissolve 0.2 g. of the dye in 2 cc. of N Na_2CO_3 and 20 cc. of water heated to boiling. Add a drop of the soln. to be tested to filter paper and promptly follow with a drop of the reagent. 0.003 mg. of K can be detected. Also in Kali (U.S.S.R.) 1933, No. 10, 44. W. T. H.

Sensitive Spot Test for Indium. A. S. Komarovsky and N. S. Poluektov. (*Mikrochemie*, 1934, 16, 227-232).—S. G.

E-2

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PROCESSES AND PROPERTIES INDEX

Ca

7

Determination of small quantities of germanium. N. S. Poluektov—*Zavodskaya Lab.* 5, 27 8(1935). The volumetric method of Tchakirian (*C. A.* 22, 4082) gives good results only for concns. of more than 1 mg. Ge. The use of MoO_3 for the detn. of Ge suggested by Grosscup (*C. A.* 25, 1751) was developed into a colorimetric detn. of less than 1 mg. Ge with an accuracy to 0.002 mg. for 0.018 mg. Ge. To prep. the reagent, dil. a mixt. of 8 cc. of 15% NH_4 molybdate and 8 cc. of concd. HNO_3 to about 100 cc., add 8 cc. of 5% Mohr salt and 40 cc. of satd. NaOAc, and dil. to 200 cc. Reduce the vol. of a HCl soln. of Ge (obtained by steam distn. of a sample in HCl) by evapg., make up the soln. to 3.5-4 *N* HCl and ppt. GeS_2 with H_2S. Proceed likewise with 2 cc. of a standard soln. contg. 0.2 mg. Ge and dil. with 4 *N* HCl to a vol. equal to that of the soln. to be tested. The next day centrifuge the 2 solns., pour off the supernatant soln. and dissolve the CS_2 ppts. by gentle heating in a mixt. of 0.1 cc. of 25% KOH and 0.05 cc. H_2O_2. Transfer the solns. into measuring flasks, introduce 1 cc. of 25% Na_2SO_3 to decompose the excess H_2O_2, add a few drops of dil. H_2SO_4 and 25 cc. of the reagent, make up to 50 cc., and after 15 min. compare the 2 solns. Since SiO_2 (and P) gives the same blue reaction, a correction must be made by comparing a blank of 4 *N* HCl with the standard soln. similarly treated. Reserve solns. of NH_4 molybdate and NaOAc should be stored in paraffined flasks. C. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BC

H 1

[illegible] drop reaction for indium. A. S. Komarovski and [illegible] Poluektov (Mikrochem., 1935, [illegible]).—The [illegible] is applied to paper impregnated with alizarin or quinalizarin, and exposed to NH_3 vapour. On neutralizing with H_2BO_3. In leaves a red, or a purple, lake, respectively; limit, for both [illegible] g. Al if present is suppressed by addition of [illegible] Co, Mn, and Fe (first reduced to Fe^{++} by $Na_2S_2O_3$) are removed by treating the coloured spot with KCN. J. S. A.

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

3RD AND 4TH ORDERS

2ND LETTER

AUTHOR INDEX

1ST AND 2ND LETTER

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

BC

a-1

Reactions for germanic and boric acids. N. S. Poluektov (Mikrochem., 1935, 23, 48—52).—H_4GeO_4 gives similar reactions to H_3BO_3 with mannitol, quinalizarin in conc. H_2SO_4, and p-nitrobenzene-azochromotropic acid in conc. H_2SO_4, but the reactions are not so sensitive. A. R. P.

Detection of small quantities of germanium with a drop reaction. A. S. Komarovsky and N. S. Poluektov (Mikrochem., 1935, 23, 68—73).—The [illegible] of GeO_2 is evaporated to dryness with H_2O_2 and the residue distilled with $KMnO_4$ and 3[illegible]-4N-HCl. The distillate is mixed with NH_4OAc and a few drops are placed on a piece of filter-paper, which is then heated with a drop of a 7·5% solution of $(NH_4)_2MoO_4$ in 1 : 1 HNO_3 and a drop of 0·1% aq. benzidine acetate. A blue colour is perceptible with > 0·25 × 10⁻⁶ g. of GeO_2 in 0·025 c.c. Procedures are given for the detection of Ge in ores and Zn electrolytes. A. R. P.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

7

"On the Determination of Small Quantities of Germanium. N. S. Poloskiov (Zavodskaya Laboratoria (Works' Lab.), 1936, 5, (1), 27-28).—[In Russian.] See abstract from German source, Met. Abs., this vol., p. 309.—D. N. S.

Volumetric determination of sulfur in sulfidic ores. N. S. Poloskiov and V. A. Nazarenko. Zavodskaya Lab 5, 731-3(1936).—A sample of pyrites is fused with Na_2CO_3 + $KMnO_4$ (Vortmann, Übungsbeispiele quant. chem. Analyse 5th Ed., 89(1922)), and the H_2SO_4 in the filtrate is detd. by the $BaCrO_4$ method of Andrews (J. Am. Chem. Soc. 11, 567(1889)) as modified by Bruhns (Z. anal. Chem. 45, 573(1900)). Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

m

9

Detection of Small Quantities of Germanium by a Spot Reaction. A. S. Komarovskiy and N. S. Poluektov (*Zhurnal Prikladnoi Khimii* (*J. Applied Chem.*), 1936, 9, (1), 159-163).—[In Russian.] A drop of the alkaline or feebly acid solution is treated drop by drop with a 15% solution of $(NH_4)_2MoO_4$ in 1 : 1 HNO_3 then with a 0·1% solution of benzidine in $CH_3{\cdot}CO_2H$, followed by $CH_3{\cdot}CO_2Na$ or NH_3 fumes to reduce the acidity; Mo-blue colour indicates the presence of Ge (if SiO_2 and P_2O_5 are absent).—N. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PROCESSES AND PROPERTIES INDEX

7

CA

Sensitive test for germanium. N. S. Poluektov. *J. Applied Chem.* (U. S. S. R.) 9, 2302-4 (in German 2304-6) (1936). Heat for 1 hr. on an oil bath at 165° a mixt. of 40 g. phthalic acid, 14 g. α-naphthol, and 50 g. H_3BO_3 in 500 cc. of 96% H_2SO_4, pour into water, wash the ppt. by decantation, dry, and boil with PhMe. Ext. the residue with boiling water, ppt. with HCl and treat with 10% KOH, forming a difficultly sol. K salt, recrystallize several times to remove H_3BO_3, and add HCl to produce hydroxynaphthacenequinonesulfonic acid. A soln. (0.01 %) of this in concd. H_2SO_4 gives with Ge a bright pink color when examd. in a blue light. The test is made by evapn. of a drop of the sample in a porcelain dish and addn of 2-3 cc. of the reagent. A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BC

2-1

Detection of gallium using colour reactions. N. S. Poluektov (Mikrochem., 1938, 19, 248—252).—Ga gives with alizarin in presence of NH_3+NH_4Cl a bright red lake. The sensitivity is enhanced by concentrating the ppt. at an Et_2O-H_2O interface. Ga, but not Al or In, gives with $K_4Fe(CN)_6$+$MnCl_2$ in presence of oxidising agents (*e.g.*, $KBrO_3$) a sensitive reddish-brown coloration or ppt. Ga is best separated from other metals by extraction of $GaCl_3$ with Et_2O, followed by extraction from the Et_2O layer by means of NaOH. Ga is then ppted. by means of 8-hydroxyquinoline before applying drop tests.

J. S. A.

CHEMICAL ELEMENTS

OPEN

MATERIALS INDEX

A58-35A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

BC

d-1

Colour reaction with 2 : 2'-dipyridyl for molybdenum. A. S. Komarovski and N. S. Poluektov (J. Appl. Chem. Russ., 1937, 10, 555—558).—2 drops of 3% 2 : 2'-dipyridyl in EtOH and 1 drop of a solution of 10 g. of $SnCl_2$ in 20 ml. of conc. HCl are added to a drop of the neutral or slightly acid solution, when a reddish-violet solution is obtained in presence of $< 4 \times 10^{-7}$ g. Mo. Re^{V}, As^{V}, and V^{V} do not interfere, whilst in presence of W tartaric acid should be added.

R. T.

Application of the ferro-dipyridyl complex in micro-analysis. N. S. Poluektov and V. A. Nazarenko (J. Appl. Chem. Russ., 1937, 10, 2105—2108).—The complex salt $[Fe^{II}(2:2'\text{-dipyridyl})_3]NO_3$ gives characteristic microcryst. ppts. with I' (1 μg.), CNS' (0·2), VO_3' (0·025 V), Cr_2O_7'' or MnO_4' (0·08 Cr or Mn), ReO_4' (0·25—0·5 Re), $Fe(CN)_6'''$ (0·2), $Fe(CN)_6'''$ (0·033), $Fe(CN)_5NO''$ (0·05), $HgCl_2$ (0·1 Bi), $SnCl_2$ (0·5 Sn), $HgCl_2$ (0·02 Hg), and fluorotantalate (0·1 μg. Ta).

R. T.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

a

a-1

Drop method of detection of rhenium. N. S. POLUEKTOV (J. Appl. Chem. Russ., 1938, 11, 534–538).—Three drops of conc. H_2SO_4 and 1 drop of 10% Br in conc. HBr are added to a drop of the solution, and the mixture is distilled. 1 ml. of conc. HBr is added to the distillate, the mixture is evaporated to dryness at 100° (to eliminate As, Se, and Ge), and the residue is warmed with H_2O_2, to convert $ReOBr_3$ into $HReO_4$. This is dissolved in a drop of H_2O, and 2s-tartaric acid and $SnCl_2$ are added, followed by 1% Na_2TeO_4, when a black ppt. or turbidity due to liberation of Te is obtained in presence of < 0·5 μg. Re; other metals do not interfere. Re is quantitatively ppted. by adding OsO_4 to the distillate, and saturating with H_2S; the solution is centrifuged, and the ppt. of Re_2S_7 is dissolved in 10% H_2O_2. Re is detected in the solution as above. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

C4

7

Determining small amounts of selenium. N. S. Poluektov. *Voprosy Pitaniya* 9, No. 3, 74-7(1940).—A micromethod for detg. traces of Se in *food products, animal organs* and *plant parts* involves distg. the material with HBr and detg. Se by iodometric titration. The final titration is made from a microburet with 0.005 *N* $Na_2S_2O_3$. The result is accurate within 20% even with as little as 15 γ of Se in a 10-g. sample. Julian F. Smith

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

CA

7

Drop analysis of minerals. V. A. Nazarenko and N. S. Polyakov. *Razvedka Nedr* 1941, No. 1, 43-6; *Khim. Referat. Zhur.* 4, No. 9, 84(1941).—Spot tests are proposed for identifying minerals under field conditions. Detailed directions are given for detecting V, Li and Zr, and a no. of the most specific reactions for 20 elements are given. The sensitivities of these reactions are listed. W. R. H.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

7

Colorimetric determination of tungsten. N. S. Poluektov. *Zavodskaya Lab.* 10, 92-3(1941).—For rapid detns. the method of Feigl and Krumholz (*C. A.* 27, 243) was modified as follows: Mix 0.5 ml. of the test soln. contg. about 2% of NaOH with 0.1 ml. of 25% NH_4CNS soln. and 1.4 ml. of 10% soln. of $SnCl_2$ in concd. HCl. Keep in boiling water for 2 min., cool in water, add 0.5 ml. alc., and compare in a colorimeter with a standard soln. contg. 10-100 γ W and treated similarly. The method is good for detg. up to 2 γ W in 0.5 ml. The intensity of coloration is directly proportional to W content within the range of 2-100 γ W. The sensitivity is about 7.8% less than by the Feigl method. This method is being used for the semimicrocolorimetric detn. of W in ores and minerals in field tests. B. Z. Kamich

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

CP

7

Colorimetric determination of rhenium by a catalytic reaction. N. S. Poluektov. *J. Applied Chem.* (U. S. S. R.) 14, 695-702(1941).—The catalytic reaction between Na tellurate and $SnCl_2$ was studied as a means for the colorimetric det. of Re. The above reaction leading to the formation of Te and $SnCl_4$ is catalized by Re acid and its salts. If a protective colloid is used, the Te remains suspended colloidally in the soln. and can be readily det'd. colorimetrically; this gives a measure of Re present. A preliminary study showed that max. light absorption in this suspension occurs at 430-470 mμ; hence the det. of extinction of the soln. with a suitable light filter can be used to measure the intensity of "color" in the soln. Gelatin or gum arabic is a suitable protective colloid. It was found that the intensity of color in the soln. is directly proportional to time up to 2-4 hrs.; after 10-20 hrs. there is a drop of rate of color formation. This proportionality permits comparison of solns. made up at different times. Variations of the amts. of the reactants were made to det. the optimum conditions. With a step photometer it is feasible to det. the limiting concn. of Re at $1:5 \times 10^6$. In the course of the study the direct proportionality between color and amt. of Re was established. Mo is an interfering substance, and if present in appreciable amts. it should be sepd. Various acids change the degree of color, HNO_3 suppressing the reaction completely. The final procedure was developed as follows. 3 portions of soln. contg. 0.1-0.001 γ Re are placed in graduated test-tubes, to one there is added a standard soln. of HReO, in amt. between 0.02 and 0.1 γ Re, into another there is added 0.002-0.01 γ Re. All solns. are dild. to 1.5 ml. and are treated with the reaction mixt. (1 ml.), the latter being prepd. by mixing 5 ml. Na tellurate soln. (0.5%), 2 ml. tartaric acid soln. (45 g. in 100 cc. soln.), 1.5 ml. gelatin (0.5%), and 1.5 ml. $SnCl_2$ (100 g. granulated Sn dissolved in 250 ml. HCl). The mixt. is mixed and let stand 1-2 hrs.; simultaneously a blank is run with 1.5 cc. H_2O and 1 cc. of reagent mixt. If, after 1-2 hrs., the mixt. does not develop color, it is let stand until the next day. The solns are examd. in a step photometer; comparison is made between the 1st and 2nd solns. after standing 1.5-2 hrs., or the 1st and 3rd after standing 1 day. The amt. of Re in the test soln. is given by: $x = aE_x/(E_{x+a} - E_x)$, where x = desired amt. of Re, a = amt. of the standard Re soln. added to the 2nd or 3rd test tube, E_x = extinction of the test soln., E_{x+a} = extinction of the test soln. with standard Re soln. added. If a photometer is not available, it is possible to compare the solns. in identical test tubes by the method of diln. to equal color density; the diluent is made up of 10 cc. reagent soln. and 15 cc. H_2O. The method, with the photometer, gives accuracy of 10-20% in the range of 0.1-0.001 γ Re. In general, the least amt. of Re necessary for detection is 0.005-0.002 γ.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PROCESSES AND PROPERTIES INDEX

7

Determination of concentrations of Au up to 0.00001%. N. S. Poluektov. *Trudy Vsesoyuz. Konferentsii Anal. Khim.* 2, 303-8(1943).—A mixt. of *p*-dimethylaminobenzalrodanine (I), $CHCl_3$, and benzene (1 ml. of alc. 0.03% soln. of I mixed with 13 ml. of benzene and the vol. brought to 50 ml. with $CHCl_3$) was used as reagent for detecting and detg. Au. The concn. of this soln. is 0.0000% with respect to I. Adding 0.5-1.0 ml. of the reagent to an aq. soln. of Au salts acidified with 3 drops of HNO_3 and shaking the soln. vigorously resulted in a change in color of the $CHCl_3$-benzene layer from yellow (color of the reagent) to pink violet. Comparisons with blank expts. revealed that 0.1-0.2 γ of Au could be detected in 5 ml. of the soln. (limiting concn. 1:25,000,000-1:50,000,000). To det. Au in solns. contg. Sb, dissolve 10 g. of metallic Sb (in control analysis add various quantities of Au) in aqua regia and boil the soln., mix. with 20 ml. of concd. HCl and 10 ml. of $HgCl_2$ (100 mg. of Hg). Add concd. $SnCl_2$ to the hot soln. until all Hg ppts., filter after 24 hrs., wash the ppt. first with HCl, then with water, dry, ignite with filter, dissolve the residue by heating in a mixt. of 3 drops of concd. HCl and 1 drop of HNO_3, evap. the soln. nearly to dryness, add 3 drops of N HNO_3 and water, filter (all Ag remains as AgCl), wash the ppt. several times with water, dil. the filtrate and wash waters to 10-20 ml., and det. Au in the soln. by the colorimetric method. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

7

Determination of minute quantities of platinum. N. S. Poluektov and P. G. Spivak (Rabota Provedena v Nauch.-Issledovatel. Inst. Redkikh i Malykh Metallov (Giredmet)). *Zavodskaya Lab.* 11, 398-408(1945).—The method, developed for detg. small quantities of Pt in metallic sublimate, is based on the reaction with $SnCl_2$ and AcOEt. Dissolve 10 g. of the sample in aqua regia, mix the soln. with $HgCl_2$ (50 mg. of Hg) and excess $SnCl_2$ until a residue of metallic Hg appears, boil the soln. for 5 min., let stand, and filter. Wash the ppts. first with HCl, then with NH_4NO_3 soln., ignite in crucibles, heat the ppts. twice with NH_4I until all NH_3 evaps. and dissolve Pt by boiling with 3 drops of HNO_3 and 6 drops of HCl. Evap. the soln. nearly to dryness, dil. with several drops of water, transfer the soln. to a test tube with marks at 0.8, 1.1, and 1.35 ml., add water to 0.8 ml., 0.3 ml. of $SnCl_2$ to 1.1 ml. (100 g. of metallic Sn in 250 ml. of concd. HCl), and 0.25 ml. of AcOEt to 1.35 ml. Stopper the test tube, shake, let stand (or centrifuge lightly), and compare the color of the AcOEt layer with that of a blank test soln. The content of all samples analyzed was less than 0.1 g./ton. The lower limit of Pt that can be detected by this method is 0.08 g./ton in a 10-g. sample. The reaction is highly sp. The presence of even traces of Hg, Se, and Te and of large quantities of Ag affects the results. The harmful effect of Te can be avoided by treating the ppt. after the combustion with dry NH_4I; Te is evapd. (probably in the form of TeI_4). W. R. H.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

15

*250. **The Use of Dry Reagents for Analysis of Ores and Minerals in Field Conditions.** (In Russian.) N. S. Poluektov and M. P. Nikonova. *Journal of Analytical Chemistry* (U.S.S.R.), v. 2, July-Aug. 1947, p. 236-238.

Describes use of dry reagents for the detection of B, Va, Ni, Sb, and Cr, using spot reactions.

C-A.- Vol.43, 6935 c

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

PROCESSES AND PROPERTIES INDEX

7

Quantitative approximate semimicro determination of cerium and total rare earths in ores and minerals. N. S. Polukhin and M. P. Nikonova. *Zhur. Anal. Khim.* 3, 351-61 (1948). A greater sensitivity is obtained by a modification of the accepted method. This modification consists of detg. Ce in a soln. contg. Na citrate, H_2O_2, and K_2CO_3. In the presence of elements interfering with the colorimetric detn., Ce is pptd. as oxalate and the ppt. dissolved in $Al(NO_3)_3$. Expts. with quantities of Ce of 50-100 γ showed that the pptn. of Ce with oxalate is not complete. The less Ce in soln. the greater is the percentage left unpptd. Considerable losses of Ce were also experienced if pptn. was done in the presence of Mo or V. For the analysis of minerals this is not serious since these elements are not likely to be encountered frequently. Also, the presence of other rare earths will induce better pptn. of Ce by virtue of copptn. In a sample of 10-25 mg. Ce was estd. by this method with an accuracy of ±10-10%. The refinement in the detn. of the total rare earths consists of the use of a torsional micro-balance equipped with a Pt weighing pan. The decompn. of the sample depends on the nature of other elements present.

M. Hosch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6

POLUEKTOV, N.S.

[Use of radioisotopes in investigations of the analytic chemistry of zirconium and hafnium] Primenenie radioaktivnykh izotopov v issledovaniiakh po analiticheskoi khimii tsirkoniia i gafniia. Moskva, 1955. 17 p. (MIRA 14:6)

(Zirconium--Analysis) (Hafnium--Analysis)
(Radioisotopes)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341910015-6"